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REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Applicant asserts that the present invention is new, non-obvious and useful. Favorable reconsideration and allowance of the application is respectfully requested.

Status of Claims

Claims 43-45, 47 and 49-52 are pending in the application and have been finally rejected.

In this Amendment, Claims 43, 45, 47, 49, 51, 52 and 56 have been amended, claims 53-55 have been canceled without prejudice, and new claims 58-66 have been added. Applicant asserts that no new matter has been added by the claim amendments and additions.

CLAIM REJECTIONS

35 U.S.C. § 103 Rejections

In the final Office Action, the Examiner rejected claims 43-45, 49-53 and 55 under 35 U.S.C. § 103(a), as being unpatentable over SaitoU.S. Pub. No. 2001/0017649 to et al. (U.S. Patent No. 6,184,922 B1) in view of Fukahara et al. (U.S. Patent No. 6,501,862), Honda et al. (U.S. Patent Application Publication No. 2004/0225223) and Kim et al. (U.S. Patent No. 6,314,211).

Applicants have amended independent claim 43 to specify that the dilution pattern used to select the selected image data “is repeated in every four rows of the image, such that every second green pixel is selected from a first row, every second blue pixel is selected from a second row, and every second red pixel is selected from a third row”. This amendment finds support in the specification as filed at page 11, line 25 - page 12, line 9, and at FIGS. 3 and 4. In view of this amendment, Applicants respectfully traverse the rejection.

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Applicants assert that Saito, Fukuhara, Honda and Kim do not teach or suggest, either alone of in combination, a system for reconstructing an image as recited in amended independent claim 43, the dilution pattern used to compress the selected image data “is repeated in every four rows of the image, such that every second green pixel is selected from a first row, every second blue pixel is selected from a second row, and every second red pixel is selected from a third row”. None of Saito, Fukuhara, Honda or Kim teaches or suggests any image reconstruction system wherein a controller receives selected image data that has been compressed using such a dilution pattern as recited. Specifically, Fukuhara, the reference used by the Examiner to show compression using a dilution pattern, describes simply downsampling (thinning) the image by $\frac{1}{4}$ both vertically and horizontally, or by 1/16 as a whole. Fukuhara certainly does not disclose or even suggest the specific dilution pattern now recited in amended independent claim 43. Applicant therefore asserts that independent claim 43 as amended is allowable over Saito in view of Fukuhara, Honda and Kim.

As discussed above, independent claim 43 as amended is patentable over Saito in view of Fukuhara, Honda and Kim. Each of claims 44, 45 and 49-53 is dependent on amended independent claim 43 and includes all the limitations of this claim. Therefore, dependent claims 44, 45 and 49-53 are likewise allowable. (Applicants note that claim 55 has been canceled herein.)

In view of the above, Applicants respectfully request that the rejection of claims 43-45 and 49-53 under 35 U.S.C. § 103(a) in view of Saito in view of Fukuhara, Honda and Kim be withdrawn.

New claims 58-60 have been added herein to specify and define the specific dilution pattern according to which the selected image data that the controller is to receive from an in-vivo device has been compressed. New claim 58 specifies that the dilution pattern further comprises selecting a same amount of red pixels and blue pixels and twice that amount of green pixels. New claim 59 specifies that the dilution pattern further comprises

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selecting every second green pixel from said second row, and selecting no pixels from a fourth row. New claim 60 specifies that the dilution pattern further comprises selecting every second red pixel from a fourth row, such that a same amount of green pixels and blue pixels are selected and twice that amount of red pixels are selected. These new claims 58-60 find support in the specification as filed at page 11, line 25 - page 12, line 9, and at FIGS. 3 and 4.

As discussed above, amended independent claim 43 as amended is patentable over Saito in view of Fukuhara, Honda and Kim. Each of claims 58-60 is dependent on amended independent claim 43 and includes all the limitations of that claim. Therefore, new dependent claims 58-60 are likewise allowable. In any case, none of Saito, Fukuhara, Honda or Kim teaches or suggests the specific dilution patterns recited in new claims 58-60, and therefore a combination of Saito, Fukuhara, Honda and Kim does not teach or suggest the limitations of any of new claims 58-60. Applicant therefore asserts that new dependent claims 58-60 are allowable over Saito in view of Fukuhara, Honda and Kim.

In the final Office Action, the Examiner rejected claim 47 under 35 U.S.C. § 103(a), as being unpatentable over Saito U.S. Pub. No. 2001/0017649 to et al. in view of Fukuhara et al., Honda et al., and Kim et al. and in further view of He et al. (U.S. Patent No. 6,600,517).

Claim 47, which depends from amended independent claim 43, recites that the controller is to post-process by color suppression. Amended independent claim 43 is allowable over the combination of Saito et al., Fukuhara et al., Honda et al. and Kim et al. in view of the above discussion, and dependent claim 47 includes all the limitations of amended independent claim 43. He et al. do not remedy the deficiencies of Saito et al., Fukuhara et al., Honda et al. and Kim et al., such that dependent claim 47 is also allowable over the combination of Saito et al., Fukuhara et al., Honda et al. and Kim et al. in further view of He et al.

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In the final Office Action, the Examiner rejected claim 54 under 35 U.S.C. § 103(a), as being unpatentable over SaitoU.S. Pub. No. 2001/0017649 to et al. in view of Fukuhara et al., Honda et al., and Kim et al. and in further view of Hattori et al. (U.S. Patent No. 5,032,913). Applicants note that claim 54 has been canceled herein, such that this rejection is now moot.

In the final Office Action, the Examiner rejected claims 56-57 under 35 U.S.C. § 103(a), as being unpatentable over SaitoU.S. Pub. No. 2001/0017649 to et al. in view of Fukuhara et al., Honda et al., and Kim et al. and in further view of Saitou (U.S. Patent No. 4,834,070).

Claims 56-57, which depend from amended independent claim 43, recites that the controller is to post-process by color suppression. Amended independent claim 43 is allowable over the combination of Saito et al., Fukuhara et al., Honda et al. and Kim et al. in view of the above discussion, and dependent claims 56-57 include all the limitations of amended independent claim 43. Saitou does not remedy the deficiencies of Saito et al., Fukuhara et al., Honda et al. and Kim et al., such that dependent claims 56-57 are allowable over the combination of Saito et al., Fukuhara et al., Honda et al. and Kim et al. in further view of Saitou.

Applicants have also added new claims 61-66 directed to a system for dilution of in vivo image data for subsequent reconstruction thereof. The claimed system comprises a data compression module to receive image data acquired by an in-vivo device and to compress said image data using a dilution pattern, wherein said dilution pattern is repeated in every four rows of the image data, such that every second green pixel is selected from a first row, every second blue pixel is selected from a second row, and every second red pixel is selected from a third row.

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New dependent claims 62 and 63 specify that the data compression module is implemented as part of a microprocessor or as part a transmitter in an in vivo device. New dependent claims 64-66 are similar to new claims 58-60 and define the specific dilution pattern according to which the selected image data is to be compressed.

None of Saito, Fukuhara, Honda or Kim, either alone or in combination, teaches or suggests a system for dilution of in vivo data for subsequent reconstruction thereof, wherein the selected image data is compressed using a dilution pattern that is repeated in every four rows of the image, such that every second green pixel is transmitted from a first row, every second blue pixel is transmitted from a second row, and every second red pixel is transmitted from a third row, as recited in new claim 61. None of Saito, Fukuhara, Honda or Kim teaches the specific dilution patterns recited in new claims 64-66. Therefore, new claims 61-66 are patentable allowable over Saito in view of Fukuhara, Honda and Kim.

Conclusion

In view of the foregoing amendments and remarks, pending claims 43-45, 47 and 49-66 are allowable. Their favorable reconsideration and allowance is respectfully requested.

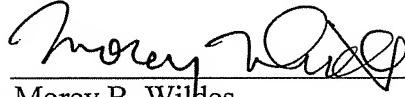
Should the Examiner have any questions or comments as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Other than the Request for Continued Examination along with a Petition for a Three-Month Extension of Time, no fees are believed to be due associated with this paper.

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However, if any such additional fees are due, please charge such fees to deposit account No. 50-3355.

Respectfully submitted,



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